
Established Biometric Standards as of 7 October 2004

The table appearing on the following page lists approved biometric standards published by the American National Standards Institute (ANSI) and the International Organization of Standards (ISO). This list also includes two biometric standards developed outside of the ANSI and ISO processes, NISTIR 6529-A (the Common Biometrics Exchange Formats Framework) and the OASIS XCBF (XML Common Biometric Format) specification.

The standards listed in the table are organized into the following categories:

- [Biometric Data Interchange Format Standards](#)
- [Biometric Interface Standards](#)
- [Biometric Application Profile Standards](#)
- [Security-Related Biometric Standards](#)
- [Biometric Standards for Identification Cards](#)

DESIGNATION	TITLE	STATUS
BIOMETRIC DATA INTERCHANGE FORMAT STANDARDS		
Information Systems—Data Format for the Interchange of Fingerprint, Facial, & Tattoo (SMT) Information	ANSI/NIST-ITL 1-2000	Approved ANSI standard in use by the FBI and other federal, state, and local agencies. It is also a de facto standard used by the UK's Home Office and Interpol.
Information Technology—Face Recognition Format for Data Interchange	ANSI INCITS 385-2004	Published as ANSI standard in June 2004
Information Technology—Finger Image Based Interchange Format	ANSI INCITS 381-2004	Published as ANSI standard in June 2004
Information Technology—Finger Minutiae Format for Data Interchange	ANSI INCITS 378-2004	Published as ANSI standard in February 2004
Information Technology—Finger Pattern Based Interchange Format	ANSI INCITS 377-2004	Published as ANSI standard in February 2004
Information Technology—Iris Image Interchange Format	ANSI INCITS 379-2004	Published as ANSI standard in June 2004
BIOMETRIC INTERFACE STANDARDS		
Common Biometric Exchange Formats Framework	NISTIR 6529-A	Original CBEFF standard published as NISTIR 6529 in 2001; NISTIR 6529-A published in 2004
BioAPI Specification, Version 1.1	ANSI/INCITS 358-2002	Published as ANSI Standard in 2002
OASIS XML Common Biometric Format, V 1.1	OASIS XCBF v1.1	Published as OASIS Standard in 2003
BIOMETRIC APPLICATION PROFILE STANDARDS		
Application Profile – Interoperability and Data Interchange – Biometrics-Based Verification and Identification of Transportation Workers	ANSI/INCITS 383-2004	Approved as an ANSI Standard in August 2004. Not yet published.
Application Profile for Interoperability, Data Interchange and Data Integrity of Biometric Based Personal Identification for Border Management		Approved as an ANSI Standard in October 2004. Not yet published.

SECURITY-RELATED BIOMETRIC STANDARDS		
Biometric Information Management and Security for the Financial Services Industry	ANSI X9.84-2003	Published in 2003 (replaces 2001 edition)
BIOMETRIC STANDARDS FOR IDENTIFICATION CARDS		
Identification Cards—Integrated Circuits(s) Cards with Contact—Part 11: Personal Verification Through Biometric Methods	ISO/IEC 7816-11:2004	Published as an International Standard in 2004